Quarterly Summary of State and Local Government Tax Revenue
Survey Methodology

The U.S. Census Bureau sponsors and conducts this census of state governments as authorized by Title 13, United States Code, Sections 161 and 182. All responses are voluntary.

This is a recurring quarterly survey of state and local tax revenue estimates, as well as detailed tax revenue data for individual states governments. The state data covers the fifty state governments, as well as all dependent state-level governmental entities.

While the state data records are ultimately from state government sources, the classification of taxes among the different categories is the responsibility of the U.S. Census Bureau. Therefore, tax classification might not reflect the actual classification or presentation as provided by the various state government respondents.

The survey measures tax revenues of state and local governments on a calendar quarter basis.

Population of Interest

The data include the 50 state governments, all local government property tax collectors and local government non-property tax collectors. All state government tax collection is covered. Although there is coverage error for the property tax collectors, it is believed to be small. The non-property tax collection is not completely covered. Currently, the Census Bureau is redesigning the entire survey with special emphasis on the non-property tax collection portion.

The state government tax data presented by the Census Bureau may differ from data published by state governments because the Census Bureau may be using a different definition of which organizations are covered under the term, "state government." For the purpose of the survey statistics, the term "state government" refers not only to the executive, legislative, and judicial branches of a given state, but it also includes agencies, institutions, commissions, and public authorities that operate separately or somewhat autonomously from the central state government but where the state government maintains administrative or fiscal control over their activities as defined by the Census Bureau.

For further information on the definition and organization of governments, see [Chapter 1 of the Government Finance and Employment Classification Manual](#) and the [2007 Census of Governments.](#)

Content of the Survey

Government tax authorities report tax revenues by type of tax. Most local governments report only property tax collections and some report significant non-property revenues such as income and sales taxes. State governments report data for more than 25 types of taxes including personal income, sales, corporate income, motor fuel sales, motor vehicle license, and severance taxes.

In this survey, "taxes" are defined as all compulsory contributions exacted by a government for public purposes, except employer and employee assessments for retirement and social insurance purposes, which are classified as insurance trust revenue. Outside the scope of this collection are data on the

unemployment compensation "taxes" imposed by each of the state governments. However, all receipts from licenses and compulsory fees, including those that are imposed for regulatory purposes, as well as those designated to provide revenue are included.

Tax revenue is further defined to include related penalty and interest receipts of a government, but to exclude protested amounts. The deduction from gross collections of amounts refunded is particularly large with respect to motor fuel sales taxes ("gasoline" taxes) and individual income taxes.

Concepts and Terminology

For this survey, the concept of "taxes" is comprised of all compulsory contributions exacted by a government for public purposes, except employer and employee assessments for retirement and social insurance purposes, which are classified as insurance trust revenue. Included are all receipts from licenses and compulsory fees, in addition to those that are imposed for regulatory purposes and those designed to provide revenue. Excluded are collections for the unemployment compensation "taxes" imposed by each of the state governments and the District of Columbia.

Tax revenue is defined to include related penalties. Tax revenue excludes protested amounts, special assessments for public improvements, and refunds.

The general nature of the several major kinds of taxes shown separately in this report is suggested by their headings; definitions are included in "Description of Tax Categories" section below. For Table 1 and Table 2, the residual heading "All Other Taxes" includes primarily selective sales taxes, such as those on public utilities, with the balance involving various kinds of imposts, including death and gift taxes, severance taxes, general corporation licenses, and miscellaneous other licenses.

Data Collection

Data collected for the Quarterly Summary of State and Local Government Tax Revenue are public record and are not confidential, as authorized by Title 13, United State Code, Section 9.

Local government tax data (F-71 for local government property taxes and form F-73 for local government non-property taxes) are solicited by mail. Data are returned by mail or through web collection.

The following process describes the data collection process:

First week following the reference period   Initial mail-out

Six weeks after initial mail-out   Non-response follow-up

10 weeks after initial mail-out   Completion of data compilation and editing

Data Processing

<u>Editing</u>

Editing is a process that ensures survey data are accurate, complete, and consistent. Efforts are made at all phases of collection, processing, and tabulation to minimize errors.

Data are processed from collection methods including direct response to survey forms from state government officials, as well as from the compilation of administrative records and supplemental sources. These data are edited using ratio edits of the current year's value to the prior year's value.

In addition to the ratio edits, data are subject to classification of administrative records. The fifty state governments provide the Census Bureau with administrative records from their central accounting systems. These administrative records are unique to each state as each state is legally organized differently from every other state and, as such, each state has a unique organizational and accounting structure. The Census Bureau classifies the different accounting and organizational structures into uniform tax categories so that entities with different methods of government accounting can be presented on a comparable basis. The records represent the core, or central, state government and are limited to tax revenue. Statistics on state government tax revenues are compiled from state administrative records by Census Bureau employees, according to the Census Bureau's classification methodology as outlined in the [Government Finance and Employment Classification Manual](#).

<u>Imputation</u>

Not all respondents answer every item on the questionnaire. There are also questionnaires that are not returned despite efforts to gain a response. Imputation is the process of filling in missing or invalid data with reasonable values in order to have a complete data set for analytical purposes.

Local government property tax non-response imputation utilizes two methods that minimize bias and give more accurate imputations. When historical data are available, imputes are calculated using a median growth rate multiplied by the data from the same quarter in the prior year. In cases where no historical data are available, the missing data are imputed using the adjusted cell mean of the property tax amount.

For state government non-response, when historical state totals for a tax are available, state totals are imputed using one of the following imputation methods, depending on the tax code: mean growth rate, median growth rate, prior year correlated ratio, or direct substitution. Mean growth rate and median growth rate imputations entail multiplying the national growth rate by the data from the same quarter in the prior year (some median growth rates can go back two years). With the prior year correlated ratio method, imputes are calculated by multiplying the current year value of a correlated tax by the ratio of prior year values of the imputed tax variable to the correlated tax. However, sometimes the data necessary to impute with the prior year correlated ratio method are not available. When this occurs, data are imputed using the national median growth rate instead. The method of direct substitution is performed by pulling forward data from the same quarter in the prior year. In rare occasions, historical state totals are not available for a given tax. This can occur, for example, when there is a newly collected tax in a state. Growth rates and direct substitution imputation methods cannot be used in these situations due to the lack of prior data. Consequently, the national mean value would be used as a last resort to impute the tax.

The imputation process may be extended one step further for some states. A number of states have a decentralized government structure, where one or multiple offices can report values for each tax. These states first have a total value imputed for each tax using one of the methods previously described. Then a raking procedure is performed on the imputed total values for each tax in order to assign the imputed tax values for the individual offices.

Sometimes analysts decide to use external sources to manually impute values for certain state and tax combinations. When this occurs, analyst-imputed values are not overwritten by the imputation procedures previously discussed. Economic statistics for these supplemental sources are obtained and pro-rated from external financial reports or the Census Bureau's Annual Survey of State Finances and Annual Survey of State Tax Collections when all other data source investigations are exhausted. Supplemental records are merged with data from the state governments. Although every effort is made to obtain financial information from all state government entities, financial statements may not be available at the time the Census Bureau closes the processing, or governmental entities may not respond to our requests. As a result these data are subject to revisions for up to 7 prior quarters.

<u>Revisions</u>

Revisions reflect tax collection amounts obtained from three general sources. State government respondents have submitted revisions to amounts as originally reported. In other cases, governments have reported data, which are used to replace data that were previously imputed or estimated. Finally, some of the revisions were compiled from state government sources, both published and unpublished.

Current revisions are noted in each table by an "R" or, for Table 3, by a label following the state name, for appropriate quarters.

<u>Sampling Error</u>

The survey to obtain tax information from the state governments is a complete enumeration of all state government imposers and as such does not have any sampling error. The survey of local property tax is a probability sample, and as such, is subject to sampling error. The sample was designed to yield a national coefficient of variation of under 3.0 percent. A new sample of local property taxes was selected in the second quarter of 2010 and is able to yield estimates of sampling error. The survey of selected non-property taxes is a probability sample, and is subject to sampling error. The sample was selected in the third quarter of 2013 and was designed to yield a national coefficient of variation of under 3.0 percent.

Non-sampling Errors

All aspects of the survey collections are subject to non-sampling errors. These errors are due to mistakes that the respondent may have made, errors due to not receiving a returned questionnaire, or errors due to various processing problems, such as keying or classification. Such errors are mitigated by editing the data using prior year or current year data. Errors of nonresponse are mitigated by imputing for units that did not supply complete information.